

Hermaphroditism Among the Hesperiidae (Lepidoptera, Rhopalocera)

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While among the Lepidoptera hermaphroditism* has previously been well known, this phenomenon has hitherto been considered unusual among the Skippers. Clark¹ states that his specimen of *Atalopedes campestris* (Edwards), (caught at Cabin John, Md., July 25, 1925) was the only known case of hermaphroditism among the Skippers. Bell² (Ent. News, XXXV, p. 70, 1924) published the record of such an individual of *Polites manataaqua* (Scudder) taken by him at Oakdale, Long Island, N. Y. Richards (Bull. Brooklyn Ent. Soc. XVI, p. 251, 1931) also records another *manataaqua*, taken at Monteagle, Tenn., in 1930. Bell is of the opinion that hermaphroditism occurs more frequently among the Skippers than was previously thought. Since this rather obscure group of butterflies is often overlooked by the casual collector, it is easy to see why so few hermaphrodite Hesperiiids have been collected and observed.

Since it often requires rather careful examination of skippers to discover this peculiarity, the condition is often overlooked. If our knowledge of Skippers is to be advanced to a degree approaching other Rhopalocera more careful and extensive collecting will be necessary.

While collecting in an old cemetery near Lancaster, Texas (May 26, 1940) a perfect hermaphroditic *Pyrgus communis* (Grote) was found. I observed this specimen first as it was feeding on *Salvia* sp. Superficially, while on the wing, the insect looked like a very dark specimen that had been rubbed on one side; after being taken, the hermaphroditic condition was readily discernible. The right

*The condition here described may be perhaps more properly described as a case of gynandromorphism. Mr. Freeman retains the term above, however, since the three other cases of "hermaphroditism" previously reported are similar to that of the present paper.—Ed.

¹Clark, A. H., "The Butterflies of the District of Columbia and Vicinity." *Smithsonian Institution Bulletin* 157, Washington, D. C. 1932.

²Bell, E. L., Research Associate in Lepidoptera, American Museum of Natural History, New, N. Y., *personal communication*.

side is female, dark with the white spots greatly reduced. The fringe of the primary shows white traces in only two spots: at the apical angle and just above the inner angle, the remaining portion being black. No costal fold is present on the right side. The left side, on the other hand, shows typical male characteristics. The spots are about the average male-size and the fringes show normal male black-and-white checkering. The costal fold is present. The specimen measures 31 mm. (about average for this species.) On the under surface the differences are not so striking: the dark markings on the male side of the secondaries are somewhat reduced. The club of the right antenna is darker than the left one. On superficial examination, the sexual organs appeared somewhat enlarged. The hairlike scales, that usually fit smoothly over these organs, all protrude; and this may account for the enlarged appearance.

This individual makes our records now to include four hermaphroditic skippers. Probably other cases have been observed, or may be overlooked in collections. As far as I know, the above records are the only published accounts of hermaphroditism among the skippers.